

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the claim amendments and following remarks.

Status of Claims

Claims 1-53 are pending. Of the pending claims, claims 18-31 and 49-53 have been withdrawn from consideration as being drawn to a non-elected group of claims.

Claims 1-17 and 32-48 are remaining, of which claims 1, 32, and 48 are independent.

In the Office Action dated July 15, 2009, claims 1-14, 16-17, 32-45, 47, and 48 were rejected and claims 15 and 46 were objected to.

By virtue of the amendments above, claims 1, 2, 12, 14, 16, 32, 33, 43, 45, 47, and 48 have been amended. Independent claims 1, 32, and 48 were amended to incorporate the features recited in one of the original claims 12 and 43. Other amendments were made to independent claim 32 and dependent claims 2, 12, 14, 16, 33, 43, 45, and 47 in order to provide proper antecedent basis for elements recited in the claims.

It is submitted that no new matter has been introduced by the above amendments. Entry thereof is therefore respectfully requested.

Summary of the Office Action

Claims 1-14, 16-17, 32-45 and 47-48 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 4,307,377 to Pferd et al. (hereinafter “Pferd”).

Claims 15 and 46 were objected to as being dependent upon a rejected base claim.

The rejection above is respectfully traversed for at least the reasons set forth below.

Drawings

The indication that the Drawings submitted on October 20, 2003 have been approved is noted with appreciation.

Allowable Subject Matter

The indication that claims 15 and 46 are objected to as being dependent upon rejected base claims, but that claims 15 and 46 would otherwise be allowable is acknowledged with appreciation. At this time, claims 15 and 46 have not been rewritten in independent form because independent claims 1 and 32, from which claims 15 and 46 respectively depend, have been amended to include the subject matter in original claims 12 and 43 that is believed to be allowable over the cited documents of record for at least the reasons set forth below.

Claim Rejection Under 35 U.S.C. §102

The test for determining if a reference anticipates a claim, for purposes of a rejection under 35 U.S.C. § 102, is whether the reference discloses all the elements of the claimed combination, or the mechanical equivalents thereof functioning in substantially the same way to produce substantially the same results. As noted by the Court of Appeals for the Federal Circuit in *Lindemann Maschinenfabrik GmbH v. American Hoist and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984), in evaluating the sufficiency of an anticipation rejection under 35 U.S.C. § 102, the Court stated:

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.

Therefore, if the cited reference does not disclose each and every element of the claimed invention, then the cited reference fails to anticipate the claimed invention and, thus, the claimed invention is distinguishable over the cited reference.

- **Claims 1-14, 16-17, 32 and 47-48:**

Claims 1-14, 16-17, 32 and 47-48 were rejected under 35 U.S.C. §102(b) as being anticipated by Pferd. This rejection is respectfully traversed for at least the following reasons.

- **Independent Claims 1, 32, and 48:**

As amended, independent claims 1, 32, and 48 recite “a raster-organized surface having both image display and image acquisition modalities . . . wherein the raster-organized surface comprises emitting elements and sensing elements to perform the image display and image acquisition modalities respectively” (emphasis added). Pferd fails to teach the aforementioned claimed features for at least the following reasons.

Pferd discloses in Fig. 1 a fiber optic scanning system for scanning a piece of graphics material 20. The scanning system in Fig. 1 includes: a first bundle of fiber optics 25 located on one side of the graphics material 20 to scan the picture thereon; a second bundle of fiber optics 50 located on the other side of the graphics material 20 to pick up the scanned signals; a perforated mask 60 for holding one end of the fibers of the second bundle 50; a scanning camera 70 for scanning the signals from the ends of the second bundle 50 at the mask 60, and delivering a raw video information and X and Y-coordinate signals to camera control 80; and a vector processor 90 for converting the signals from the camera control 80 into compact data to store in image memory 100 (See from col. 3, line 33 to col. 4, line 3).

Thus, Pferd fails to teach a raster-organized surface that has both image display and image acquisition modalities, as recited in independent claims 1, 32, and 48. In the rejection of claim 1, the Office Action asserts that the scanning camera 70 in Fig. 1 of Pferd is the claimed “raster-organized surface” (See *Office Action*, page 2). However, that assertion is respectfully traversed. In Pferd, the scanning camera 70 scans the signals at the ends of the fibers in the second bundle 50. Thus, the lens in the scanning camera 70 may be a surface having an image acquisition capability. However, that lens in the scanning camera 70 does not display images. No elements in the scanning camera 70 have both an image acquisition modality and an image display modality, as recited in claims 1, 32, and 48.

Furthermore, Pferd fails to teach a raster-organized surface that comprises emitting elements and sensing elements to perform the image display and image acquisition modalities, as recited in claims 1, 32 and 48. Instead, Pferd merely discloses the functions of the scanning camera 70 which are to scan the signals from the second bundle 50 and deliver the raw video and X-Y signals to the camera control 80. As such, Pferd fails to teach any details of the scanning camera 70, much less emitting elements and sensing elements to perform image display and image acquisition modality, as recited in claims 1, 32, and 48. In the rejection of the original claims 12 and 43 which recited the “emitting elements and sensing elements,” the Office Action asserts that Pferd discloses the emitting and sensing elements in its col. 9, lines 27-57 (See *Office Action*, page 4). However, that assertion is respectfully traversed for at least the following reasons. The passage in col. 9, lines 27-57 discloses that the vector processor in Pferd (such as 90 in Fig. 1) can provide a compaction ratio of 36 to 1 (col. 9, lines 27-33) and that the compact data of the graphic information can be displayed and

edited remotely (col. 9, lines 51-57). As such, the passage in col. 9, lines 27-57 does not mention any “emitting elements” or “scanning elements,” as asserted in the Office Action.

Moreover, because Pferd discloses in col. 9, lines 27-57 that the display of the scanned graphics material can be accomplished remotely (col. 9, line 54), it confirms that the lens of the scanning camera 70 only scans the signals of the graphics material 20 but does not have both image display and image acquisition modalities, as recited in claims 1, 32, and 48.

Independent claims 1, 32, and 48 also recite that the optical characteristics of the objective are identified “through a comparison of the received images of the calibration model with each other.” Pferd also fails to teach that claimed feature. In the rejection of claims 1, 32, and 48, the Office Action asserts that Pferd discloses the comparison of the received images in col. 2, lines 62-68 (See *Office Action*, page 2). However, that assertion is respectfully traversed. Col. 2, lines 62-68 of Pferd discloses the “thresholding” of the signals from the scanning system of Fig. 1, which are considered “gray level” information. In Fig. 2, Pferd discloses a “thresholding” 11 that converts the gray level information into binary (black and white) signals by comparing the gray level information with a “chosen threshold” (See col. 4, lines 15-20). As such, Pferd teaches a comparison of the scanned images with a threshold, not with other scanned images. Therefore, col. 2, lines 62-68 of Pferd does not teach a comparison of the received images with each other, as recited in claims 1, 32, and 48.

For at least the foregoing reasons, Pferd fails to teach each and every feature of independent claims 1, 32, and 48 and thus cannot anticipate these claims. It is therefore respectfully requested that the rejection of claims 1, 32, and 48 be withdrawn, and claims 1, 32, and 48 be allowed.

o Dependent Claims 2-14, 16, 17, 33-45 and 47:

Claims 2-14, 16, 17, 33-45 and 47 are dependent from independent claims 1, 32 and 48. Thus, they are also believed to be allowable over the cited documents of record for at least the same reasons as set forth to independent claims 1, 32 and 48 above.

Moreover, these dependent claims recite additional elements not found in Pferd. For instance, claim 12 recites that the “emitting elements” and “sensing elements” are adjacent each other. As discussed above, Pferd fails to teach or suggest emitting elements and sensing elements. Thus, Pferd also fails to teach the adjacent position of the emitting and sensing elements. In addition, claims 14 and 45 recite “dual-purpose elements” to perform both image display and image acquisition modalities under a “control signal.” The rejection of claim 14 refers to col. 9, lines 27-57 of Pferd. However, as discussed above, col. 9, lines 27-57 mentions that the vector coding generates a compact factor of 36 to 1, and the graphic information can be displayed and edited remotely. As such, col. 9, lines 27-57 fails to teach any “dual-purpose elements” or any “control signal” as recited in claims 14 and 45.

It is therefore respectfully requested that the rejection of claims 2-14, 16, 17, 33-45 and 47 be reversed, and these dependent claims be allowed.

Conclusion

In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited. Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below. Please grant any required extensions of time and charge any fees due in connection with this request to Deposit Account No. 08-2025.

Respectfully submitted,

Dated: October 15, 2009

By _____/Ashok K. Mannava/
Ashok K. Mannava
Registration No. 45,301
(703) 652-3822

MANNAVA & KANG, P.C.
11240 Waples Mill Road
Suite 300
Fairfax, VA 22030
(703) 865-5150 (facsimile)